

LISTING OF CLAIMS:

1-11 (Canceled)

12. (Previously added) A fluid pump comprising:

a housing;

a shaft rotatably supported by said housing, said shaft extending in a center line and having an arm in said housing;

a cylinder bore formed within said housing;

a piston accommodated in said cylinder bore, said piston reciprocating in said cylinder bore;

a swing member disposed in said housing and driven by said shaft in swing motion to reciprocate said piston; and

a support mechanism for supporting said swing member such that said swing member swings with a variable swing angle, wherein said support mechanism includes:

a constraining member supported on said housing in a movable manner along the center line and in an immovable manner around the center line, said constraining member defining a through hole in a first axis perpendicular to the center line;

a first ring member disposed around said constraining member, said first ring member defining a pair of first through holes on the first axis and a pair of second through holes on a second axis that is perpendicular to both of the center line and the first axis and crosses with both of the center line and the first axis;

a first pin disposed on the first axis, said first pin passing through said through hole defined on said constraining member and said pair of first through holes so as to support said first ring member on said constraining member in a rocking manner;

a second ring member firmly connected to said swing member and disposed around said first ring member, said second ring member defining a pair of third through holes on the second axis; and

a pair of second pins disposed on the second axis, each of said second pins passing through said second through hole defined on said first ring member and said third through hole defined on said second ring member so as to support said second ring member on said first ring member in a rocking manner.

13. (New) A fluid pump according to claim 12, wherein:

said swing member is connected to an orbiting member having a slant plane, wherein the slant plane is inclined with respect to the shaft so that the swing member is driven by said shaft through the orbiting member;

said orbiting member is connected to said shaft such that a slant angle formed by said slant plane and the center line changes; and

said constraining member is located in said housing to move in a direction of the center line.

14. (New) A fluid pump according to claim 13, further comprising a discharge capacity detecting mechanism for detecting a discharge capacity based on an amount of displacement of said constraining member.

15. (New) A fluid pump according to claim 13, wherein:

said constraining member is cylindrically formed, and of which cross section is polygonal;

said housing includes a hole having a cross section similar to the cross section of said constraining member; and

said constraining member is slidably inserted into the hole.

16. (New) A fluid pump according to claim 13, wherein:

said constraining member is cylindrically formed, and of which cross section is shaped like a gear;

said housing includes a hole having a cross section similar to the cross section of said constraining member; and

said constraining member is slidably inserted into the hole.

17. (New) A fluid pump according to claim 13, wherein said constraining member is prevented from rotating with respect to said housing by a key fit and slides in the direction of the center line.

18. (New) A fluid pump according to claim 12, wherein:

said swing member is formed in a ring disc; and

said support mechanism is located near a center of said swing member.